

"METHOD OF FORMING FILM FOR THE CONSTRUCTION OF BAGS FOR
VACUUM PACKAGING OF PRODUCTS"

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C L A I M S

1. Method of forming a film for the construction of bags for vacuum packing of products starting from a film made up of at least one external layer made of a gas-proof plastic material and by an internal layer made of a thermoplastic material which can be hot welded, closely coupled,
10 characterised by the steps of :

- depositing, using an extruder, an additional resin film on the internal layer of the initial film, the additional resin being the same as or compatible with the thermoplastic material of said internal layer,
- having the initial film complete with additional film to pass between a smooth
15 feed roller and a shaping roller having a number of peripheral impressions, and
- placing said additional film in close contact with said shaping roller so as to have portions of additional hot resin upset into the peripheral impressions of the shaping roller, forming corresponding ridges protruding from the internal
20 surface of the composite film and defining a network of ducts.

2. Method of forming a film according to claim 1, wherein the additional resin film is deposited on the surface of the internal layer of the initial film immediately following extrusion of the latter or later on a previously prepared film.

3. Method of forming a film according to claims 1 and 2, wherein the shaping roller has isolated peripheral recesses to define the protrusions in the form of blisters with the added resin film.

4. Method of forming a film according to claims 1 and 2, wherein the
5 shaping roller has a multiplicity of alternating peripheral grooves and helical ribs, either rectilinear or not, diverging in a V formation in the direction of the length of the film starting from a median point towards the opposite sides to define together with the additional resin film, ducts which extend obliquely to the length of the film, with the possibility of interrupting crosswise said grooves
10 so as to place the resulting ducts in communication.

5. Method of forming a film according to claims 1 and 2, wherein the shaping roller has a multiplicity of peripheral grooves that extend in compliance with the axis of the roller itself to define together with the additional resin film an equivalent number of ridges with ducts oriented
15 crosswise to the length of the film.

6. Method of forming a film according to claims 1 and 2, wherein the shaping roller has a multiplicity of peripheral crossing grooves to define with the additional resin film an equivalent number of ducts which cross each other.

7. A multi-layer plastic material film, for the forming of bags for vacuum
20 packing of products, made according to the forming method in compliance with any of the previous claims.

8. A bag for vacuum packing of products made using the composite film according to claim 7 and a smooth coupled film.

9. A bag for vacuum packing of products made using an initial

composite film with fishbone patterned ducts and a second film similar to the first but differently oriented.

10. A bag for vacuum packing of products made using two films with differently shaped ducts.